

Federal Communications Commission Office of Engineering and Technology

Title: 3GPP R6 HSPA and R7 HSPA+ SAR Guidance

Short Title: HSPA SAR Guidance

Reason: This document is under Draft Review to replace the current published attachment 941225 D02 Guidance PBA for 3GPP R6 HSPA v01 of publication 447498 with 941225 D02 Guidance PBA for 3GPP HSPA v02.

Publication:

Draft For Review: 941225

Keyword: SAR Test Procedures, 3G Devices, 2.5G, GPS/GPRS/Edge, 2.1093

Rule Parts: 27, 22H, 24E

<u>First Category</u>: Administrative Requirements Second Category: Measurement Procedures

Third Category:

Question: What are the current SAR test procedures for 3G devices?

Answer:

Attached document - 941225 D01 SAR test for 3G devices v02- provides the SAR test procedures for 3G devices that operate under rule parts 22H, 24E, 27L are described in the attached document.

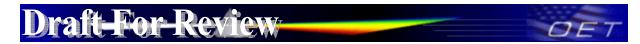
Attached document- 941225 D02 Guidance PBA for 3GPP HSPA v02 - provides guidance for requesting a Permit-But-Ask for 3GPP R6-HSPA and R7 HSPA+ SAR testing.

Attached document- 941225 D03 SAR Test Reduction GSM GPRS EDGE vo1 - provides SAR Test Reduction Procedures for 3G devices with GSM/GPRS/EDGE modes (also applicable to 2.5G with the same GSM/GPRS/EDGE modes).

These procedures must be used for applications submitted to TCBs for approval. Questions about using alternative procedures should be submitted to http://www.fcc.gov/labhelp and then use the link "Submit An Inquiry" to access the form to submit your question.

Attachment List:

941225 D01 SAR test for 3G devices v02 ,Published on: Mar 12 2009 3:39PM (existing)
941225 D02 Guidance PBA for 3GPP HSPA v02 ,Published on: Mar 12 2009 3:39PM (being changed)
941225 D03 SAR Test Reduction GSM GPRS EDGE v01 ,Published on: Mar 12 2009 3:39PM(existing)



Attachment (941225 D02 Guidance PBA for 3GPP HSPA v02)

3GPP R6 HSPA and R7 HSPA+ SAR Guidance

When SAR evaluation is required for 3GPP R6 HSPA, the procedures in KDB Publication 941225 should be followed to configure the device in the required sub-test mode(s) for SAR measurements. SAR considerations for 3GPP R7 HSPA+ devices must be determined through KDB inquiries until sufficient information can be gathered on HSPA+ devices to provide further test guidance. Unless it has been confirmed through a KDB inquiry that SAR evaluation is not necessary, PBA is required for a TCB to approve HSPA+ devices. The KDB or PBA tracking number must be included in the SAR report to clearly identify the SAR test requirements. Testing issues for HSPA or HSPA+ should be addressed through KDB inquiries before starting any SAR compliance measurements

- 1) Regardless of whether a PBA is required, the following information should be verified and included in the SAR report for HSPA and HSPA+ devices:
 - a) Output power measurement results according to the FCC 3G SAR measurement procedures (KDB 941225) and specific guidance provided through KDB inquiries; including but not limited to the sub-test configurations and Maximum Power Reduction (MPR) requirements, to determine if SAR evaluation is required for HSPA or HSPA+.
 - i) Power measurement issues must be resolved between the grantee and its test lab or TCB prior to submitting any test data through a KDB or PBA.
 - ii) The power measurement results are in agreement with the individual device implementation and specifications. For example, a power reduction on the order of 0, 2, 1, 2, 0 dB are expected for the HSPA sub-test configurations 1 5, respectively, when implemented according to 3GPP recommendations; otherwise, detailed explanations of the MPE implementation for the specific device must be included to substantiate the test results for supporting any SAR test exclusion considerations.
 - iii) Operating parameters, such as the different β and Δ values configurations for testing the device, and the power setback procedures described in 3GGPP TS 34.121 have been properly applied in the power measurements. It must be clearly documented that the HSPA or HSPA+ channels have remained active and stable with the required E-TFCI and AG index values for the duration of the measurements.
- 2) When SAR measurement is required, the test configurations, procedures and results must be reviewed by the TCB to confirm the required test parameters, including stable TFCI and output power conditions, have been used for the SAR measurements. Other issues identified in related KDB inquiries for the device must also be reviewed and addressed by the TCB before issuing equipment certification.